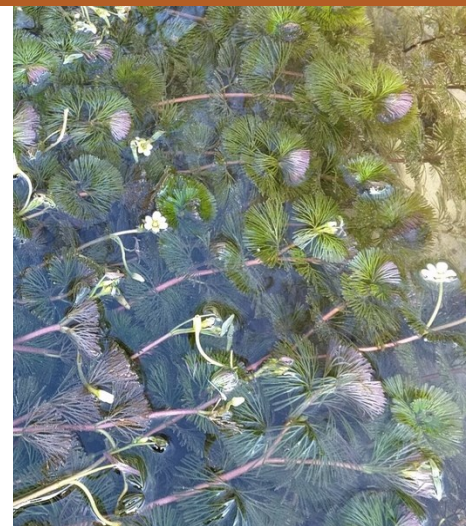
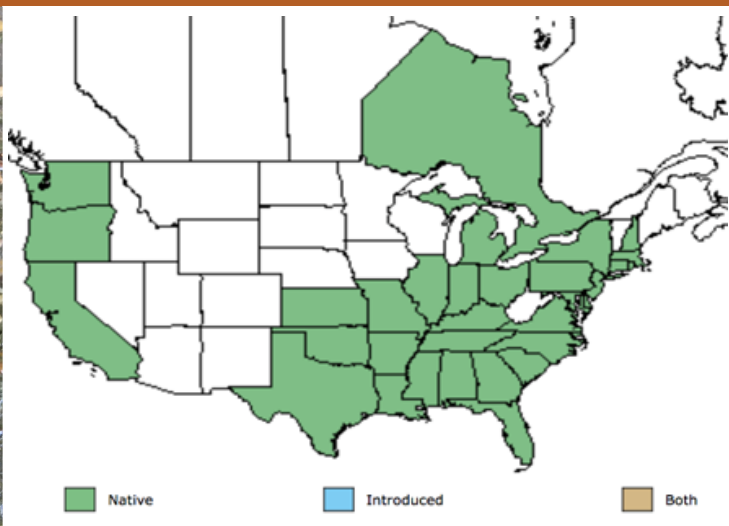


USACE Invasive Plant Species Best Management Practices

Carolina Fanwort (*Cabomba caroliniana*) - Cabombaceae (Fanwort)



Habitat & Life History

Native to Eurasia – Perennial forb/herb – OBL – Native/nuisance in contexts – Temp. tolerant – mostly reproduces vegetatively

Integrated Management Strategy Selections

Prevention

Chemical

Biological

Mechanical

Cultural



PREVENTION

- Educate public on risk of infestation and native alternatives within aquarium trade
- Restore and maintain healthy competitive vegetation, especially along susceptible waterways



CHEMICAL CONTROL

- Herbicides—diquat, endothall, flumioxazin (most effective; requires low pH (<7)), fluridone
- Use-pattern—water column

*Refer to product label for specific instructions on rate and use-pattern.



BIOLOGICAL CONTROL

- Agent—*Ctenopharyngodon idella* (Triploid grass carp); nonselective grazer
- Rearing/release—restricted in some US states; must purchase from certified hatchery



MECHANICAL CONTROL

- Hand pulling, aquatic weed rake, seine, remove floating fragments
- Weed rollers, harvester



CULTURAL CONTROL

- Drawdown
- Shading techniques: dyes, fertilize to promote planktonic algae, benthic barrier
- Establish competitive native species to reduce invasive growth



MANAGEMENT SEQUENCING

- Timing of control methods—best option is to apply chemical treatment in spring to early summer and use in conjunction with other control methods
- Monitoring—long-term monitoring may be required to measure control efficacy and detect any recolonization
- Niche-filling/Restoration—establish native vegetation in areas where Carolina Fanwort has been controlled



COMMENTS

- Mechanical control can contribute to spread via seeds, root, and shoot fragments

